REVIEWS OF BOOKS.

The Principles and Practice of Surgery, Designed for Students and Practitioners. By George Tully Vaughan, M.D., Assistant Surgeon-General, Public Health and Marine Hospital Service of the United States; Professor of the Principles and Practice of Surgery, Georgetown University, Washington, D. C. Philadelphia and London: J. B. Lippincott Company, 1903.

This volume is clearly written, its arrangement is good, it is up-to-date, and, for the most part, it presents only well established facts. The chapters on syphilis, aneurism, tuberculosis of the spine, and appendicitis are particularly to be commended for their concise and thorough exposition of the subjects discussed.

No mention is made of the use of the cautery in the treatment of anthrax, of the Matas method of arteriorrhaphy for aneurism, or of the simple and useful method of dry stretching of the nerve for sciatica.

Most surgeons would probably feel that they were not doing justice to their patients by giving saline infusions at a temperature of 100° F.; and they would scarcely choose to treat fractures of the shaft of the humerus by a method which has frequently resulted in non-union. The abdominal surgeon could hardly accept the unmodified statement that "the diagnosis of intestinal obstruction is not difficult," providing he hopes to make that diagnosis sufficiently early to effect a cure; and he would doubtless remind the author that small fæcal fistulæ do not heal if they lead to the small intestine.

At the present time it seems that there is a great demand for one-volume surgical treatises. While it may be seriously questioned if a work of 533 pages can adequately cover the subject of general surgery, even with the omission of such special branches as ophthalmology, gynæcology, etc., nevertheless, such a condensed text-book will be of special use to a student in his preparation for examination, and to the practitioner, who will regard it rather as an index to the progress of surgery than as a complete guide to diagnosis and treatment.

THOMAS BRAY SPENCE.

DAS GEWEBE UND DIE URSACHE DER KREBSGESCHWÜLSTE. Unter Berücksichtigung des Baues der einzelligen thierischen Organismen. Von DR. LUDWIG FEINBERG. Berlin: Verlag von August Hirschwald, 1903.

In this treatise the author maintains that in order to study the subject of the parasitic origin of the carcinomatous tumors, it is necessary to consider and understand the various forms of Protozoa. He wishes to show that from this consideration there may be deduced a general law, which applies not only to the single classes of one-celled animal organisms, but also to the entire group of Protozoa in general. That without discovering some such law, it is not possible to diagnose and classify any single-celled, isolated organism. He hopes that the deductions and conclusions which he is able to draw from the histological findings in the carcinomatous growths may also be found of value in explaining the etiology of Sarcomata and various skin diseases.

The work of other writers is often referred to. He holds that the lack of knowledge of the true characteristics of the Protozoa often gives rise to false conclusions. This he exemplifies in the case of some observers who have described as amœba certain cells found in the ascitic fluid in cases of carcinoma of the liver, basing their conclusions upon the amœboid movements which are seen. But these conclusions are only based upon false premises, for these same characteristics may be observed in free cancer cells, freshly prepared, and examined in normal salt solution upon a heated stage.

The work is divided into two parts. Part I discusses the single-celled animal organisms. The Rhizopoda, Mastigophora, Sporozoa, and Ciliata are considered at length. The author goes into the minute structure of these organisms, paying especial attention to the structure of the nuclear body, the amount of chromatin contained, and its relation to the protoplasm. Then follows a comparison of these single cells with the normal tissue cells.

Part II is devoted to the tissue and the etiology of the carcinomatous growths. The author describes a single-celled animal organism as the etiological factor. This parasite he calls the Histosporidium Carcinomatosum n. g. n. sp., the nomenclature being based upon its histological resemblance to the Sporozoa, and its subclass the Neosporidia, and from the fact that the carcinomatous growth depends upon the presence of this parasite in the epithelial cells. There are two forms of this parasite, "die Form der Zellinfection" (parasite in the cell), and "die Form der diffusen Infiltration" (parasite between the cells). They represent two stages of the growth, *i.e.*, the development and the degeneration.

The author has attacked the subject in a thoroughly scientific manner, and his work deserves the attention of those interested in this line of research.

PAUL MONROE PILCHER.

ANATOMY OF THE BRAIN AND SPINAL CORD. By HARRIS E. SANTEE, M.D., Ph.D. Third Edition. Chicago: E. H. Colegrove, 1903.

This is the third revised and enlarged edition of this excellent book. The arrangement of the book is such that the student can best trace the conducting paths by the grouping and chaining of neurones. There is an orderly subordination of the minor parts of the text. The different parts of the brain are displayed in connection with their physiological connections. The operculum and posterior part of the inferior frontal gyrus are shown with relation to their function as the centre of speech. Attention is similarly given to the ascending frontal, ascending parietal, and superior parietal convolutions as the best known motor areas of the cortex; also the temporal lobe as the probable seat of the centres of taste, smell, and hearing.

Comparative anatomy is also invoked to show the origin of the olfactory lobe in man and its antecedent in the lower animals.

The author shows the complex human brain as developed from a simple vesicular prototype. This book makes clear the paths of impulses, and enables the student to trace physiological functions through the nervous system.

In speaking of the various organs and parts of the nervous system, the author renders its identification more easy and its relations more simple by naming its function. Thus: "The pyramidal tracts are motor;" "Gower's tract probably carries thermic and pathetic impulses;" "Goll's column carries impulses of the muscular sense;" "All varieties of impulses are carried by Burdach's column;" "The direct cerebellar tract conveys impulses of equilibrium received especially from the viscera."

The author in the first edition used the old definition of neuron according to Waldeyer. He describes the neuron in this new edition as being a nervous entity, in the embryo structurally independent of all other neurones. In the adult their predominant relation continues to be that of contact. The different types of neurones are described and classified. The qualities peculiar to dendrites and axones are described and classified.

An elaborate and valuable table, giving the deep origin of the sensory nerves from their terminal nuclei, is furnished.

One chapter is devoted to the tracing of impulses through the better known paths formed by the various nervous groups.

These are treated under three headings: the motor, sensory (including general and special sense), and reflex.

The last chapter of the book is given to the embryology of the brain and spinal cord.

There are but few illustrations. The index is full and good. The book is interleaved with blank pages for the addition of notes.

JAMES P. WARBASSE.